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09/049,696

Page 1

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: P. Billing-Medel, *et al.*

Serial No.: 09/049,696

Filed: March 27, 1998

For: REAGENTS AND METHODS USEFUL
FOR DETECTING DISEASES OF THE
GASTROINTESTINAL TRACT

Examiner: J. Martinell

Group Art Unit: 1631

Attorney Docket No.: 6067.US.P1

Date: February 11, 2003

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Dear Sir:

Enclosed herewith is Submission of Formal Drawings of P. A. Billing-Medel, *et al.*, for REAGENTS AND METHODS USEFUL FOR DETECTING DISEASES OF THE GASTROINTESTINAL TRACT, the specification of which was filed on March 27, 1998, and received Serial No. 09/049,696.

Also enclosed are : Formal Drawings - Figures 1A - 1G through 3
Return-receipt postcard.

The Commissioner is hereby authorized to charge any additional Filing Fees required under 37 CFR 1.16, as well as any patent application processing fees under 37 CFR 1.17 associated with this communication for which full payment has not been tendered, to Deposit Account No. 01-0025. A duplicate copy of this sheet is enclosed.



23492

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Respectfully submitted,
Patricia A. Billing-Medel, *et al.*

Mimi C. Goller

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Attorney for Applicants



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Dear Sir:

Enclosed are Formal Drawings for Figures 1A -1G through Figure 3 (9 pages) of P. A. Billing-Medel, *et al.*, for REAGENTS AND METHODS USEFUL FOR DETECTING DISEASES OF THE GASTROINTESTINAL TRACT, the specification of which was filed on March 27, 1998, and received Serial No. 09/049,696.



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Respectfully submitted,
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Mimi C. Goller
Mimi C. Goller
Registration No. 39,046
Attorney for Applicants



| | | | | | |
|------------|------------|-------------|------------|-------------|------------|
| >1737775 | GAAATCACAG | GGAGATGTAC | AGCAATGGGG | CCATTTAAGA | GTTCTGTGTT |
| >1737775IH | GAAATCACAG | GGAGATGTAC | AGCAATGGGG | CCATTTAAGA | GTTCTGTGTT |
| Consensus | GAAATCACAG | GGAGATGTAC | AGCAATGGGG | CCATTTAAGA | GTTCTGTGTT |
| | | | | | |
| >1737775 | CATCTTGATT | CTTCACCTTC | TAGAAGGGGC | CCTGAGTAAT | TCACTCATTC |
| >1737775IH | CATCTTGATT | CTTCACCTTC | TAGAAGGGGC | CCTGAGTAAT | TCACTCATTC |
| Consensus | CATCTTGATT | CTTCACCTTC | TAGAAGGGGC | CCTGAGTAAT | TCACTCATTC |
| | | | | | |
| >1737775 | AGCTGAACAA | CAATGGCTAT | GAAGGCATTG | TCGTTGCAAT | CGACCCCAAT |
| >1737775IH | AGCTGAACAA | CAATGGCTAT | GAAGGCATTG | TCGTTGCAAT | CGACCCCAAT |
| >776455 | | | GTTGCAAT | CGACCCCAAT | |
| Consensus | AGCTGAACAA | CAATGGCTAT | GAAGGCATTG | TCGTTGCAAT | CGACCCCAAT |
| | | | | | |
| >1737775 | GTGCCAGAAG | ATGAAACACT | CATTCAACAA | ATAAAGGACA | TGGTGACCCA |
| >1737775IH | GTGCCAGAAG | ATGAAACACT | CATTCAACAA | ATAAAGGACA | TGGTGACCCA |
| >776455 | GTGCCAGAAG | ATGAAACACT | CATTCAACAA | ATAAAGGACA | TGGTGACCCA |
| Consensus | GTGCCAGAAG | ATGAAACACT | CATTCAACAA | ATAAAGGACA | TGGTGACCCA |
| | | | | | |
| >1737775 | GGCATCTCTG | TATCTGTTTG | AAG | | |
| >1737775IH | GGCATCTCTG | TATCTGTTTG | AAGCTACAGG | AAAGCGATTT | TATTTCAAAA |
| >776455 | GGCATCTCTG | TATCTGTTTG | AAGCTACAGG | AAAGCGATTT | TATTTCAAAA |
| Consensus | GGCATCTCTG | TATCTGTTTG | AAGCTACAGG | AAAGCGATTT | TATTTCAAAA |
| | | | | | |
| >1737775IH | ATGTTGCCAT | TTTGATTCCCT | GAAACATGGA | AGACAAAGGC | TGACTATGTG |
| >776455 | ATGTTGCCAT | TTTGATTCCCT | GAAACATGGA | AGACAAAGGN | TGACTATGTG |
| Consensus | ATGTTGCCAT | TTTGATTCCCT | GAAACATGGA | AGACAAAGGC | TGACTATGTG |
| | | | | | |
| >1737775IH | AGACCAAAAC | TTGAGACCTA | CAAAAATGCT | GATGTTCTGG | TTGCTGAGTC |
| >776455 | AGACCAAAAC | TTGAGACCTA | CAAAAATGCT | GATGTTCTGG | TTGCTGAGTC |
| >3234527 | | | AAAATGCT | GATGTTCTGG | TTGCTGAGTC |
| Consensus | AGACCAAAAC | TTGAGACCTA | CAAAAATGCT | GATGTTCTGG | TTGCTGAGTC |
| | | | | | |
| >1737775IH | TACTCCTCCA | GGTAATGATG | AACCCTACAC | TGAGCAGATG | GGCAACTGTG |
| >776455 | TANTCCTCCA | GGNAATGATG | AACCCTACAC | TGNGCAGATG | GGCAACTGTG |
| >3234527 | TACTCCTCCA | GGTAATGATG | AACCCTACAC | TGAGCAGATG | GGCAACTGTG |
| Consensus | TACTCCTCCA | GGTAATGATG | AACCCTACAC | TGAGCAGATG | GGCAACTGTG |
| | | | | | |
| >1737775IH | GAGAGAAGGG | TGAAAGGATC | CACCTCACTC | CTGATTTTCAT | TGCAGGAAAA |
| >776455 | GCGAG | | | | |
| >3234527 | GAGAGAAGGG | TGAAAGGATC | CACCTCACTC | CTGATTTTCAT | TGCAGGAAAA |
| Consensus | GAGAGAAGGG | TGAAAGGATC | CACCTCACTC | CTGATTTTCAT | TGCAGGAAAA |
| | | | | | |
| >1737775IH | AAGTTAGCTG | AATATGGACC | ACAAGGTAGG | GCATTTGTCC | ATGAGTGGGC |
| >3234527 | AAGTTAGCTG | AATATGGACC | ACAAGGTAGG | GCATTTGTCC | ATGAGTGGGC |
| Consensus | AAGTTAGCTG | AATATGGACC | ACAAGGTAGG | GCATTTGTCC | ATGAGTGGGC |
| | | | | | |
| >1737775IH | TCATCTACGA | TGGGGAGTAT | TTGACGAGTA | CAATAATGAT | GAGAAATTCT |
| >3234527 | TCATCTACGA | TGGGGAGTAT | TTGACGAGTA | CAATAATGAT | GAGAAATTCT |
| Consensus | TCATCTACGA | TGGGGAGTAT | TTGACGAGTA | CAATAATGAT | GAGAAATTCT |

FIG. 1A

| | | | | | |
|------------|------------|------------|------------|-------------|-------------|
| >1737775IH | ACTTATCCAA | TGGAAGAATA | CAAGCAGTAA | GATGTTTCAGC | AGGTATTACT |
| >3234527 | ACTTATCCAA | TG | | | |
| Consensus | ACTTATCCAA | TGGAAGAATA | CAAGCAGTAA | GATGTTTCAGC | AGGTATTACT |
| | | | | | |
| >1737775IH | GGTACAAATG | TAGTAAAGAA | GTGTCAGGGA | GGCAGCTGTT | ACACCAAAAAG |
| >1628724 | | | | | CAAAAAG |
| Consensus | GGTACAAATG | TAGTAAAGAA | GTGTCAGGGA | GGCAGCTGTT | ACACCAAAAAG |
| | | | | | |
| >1737775IH | ATGCACATTC | AATAAAGTAA | CAGGACTCTA | TGAAAAAGGA | TGTGAGTTTG |
| >1628724 | ATGCACATTC | AATAAAGTAA | CAGGACTCTA | TGAAAAAGGA | TGTGAGTTTG |
| Consensus | ATGCACATTC | AATAAAGTAA | CAGGACTCTA | TGAAAAAGGA | TGTGAGTTTG |
| | | | | | |
| >1737775IH | TTCTCCAATC | CCGCCAGACG | GAGAAGGCTT | CTATAATGTT | TGCACAACAT |
| >1628724 | TTCTCCAATC | CCGCCAGACG | GAGAAGGCTT | CTATAATGTT | TGCACAACAT |
| Consensus | TTCTCCAATC | CCGCCAGACG | GAGAAGGCTT | CTATAATGTT | TGCACAACAT |
| | | | | | |
| >1737775IH | GTTGATTCTA | TAGTTGAATT | CTGTACAGAA | CAAAACCACA | ACAAAGAAGC |
| >1628724 | GTTGATTCTA | TAGTTGAATT | CTGTACAGAA | CAAAACCACA | ACAAAGAAGC |
| >1427224 | CTA | TAGTTGAATT | CTGTACAGAA | CAAAACCACA | ACAAAGAAGC |
| Consensus | GTTGATTCTA | TAGTTGAATT | CTGTACAGAA | CAAAACCACA | ACAAAGAAGC |
| | | | | | |
| >1737775IH | TCCAAACAAG | CAAAATCAAA | AATGCAATCT | CCGAAGCACA | TGGGAAGTGA |
| >1628724 | TCCAAACAAG | CAAAATCAAA | AATGC | | |
| >1427224 | TCCAAACAAG | CAAAATCAAA | AATGCAATCT | CCGAAGCACA | TGGGAAGTGA |
| Consensus | TCCAAACAAG | CAAAATCAAA | AATGCAATCT | CCGAAGCACA | TGGGAAGTGA |
| | | | | | |
| >1737775IH | TCCGTGATTC | TGAGGACTTT | AAGAAAACCA | CTCCTATGAC | AACACAGCCA |
| >1427224 | TCCGTGATTC | TGAGGACTTT | AAGAAAACCA | CTCCTATGAC | AACACAGCCA |
| Consensus | TCCGTGATTC | TGAGGACTTT | AAGAAAACCA | CTCCTATGAC | AACACAGCCA |
| | | | | | |
| >1737775IH | CCAAATCCCA | CCTTCTCATT | GCTGCAGATT | GGACAAAGAA | TTGTGTGTTT |
| >1427224 | CCAAATCCCA | CCTTCTCATT | GCTGCAGATT | GGACAAAGAA | TTGTGTGTTT |
| >3235571 | | | | CAAAGAA | TTGTGTGTTT |
| Consensus | CCAAATCCCA | CCTTCTCATT | GCTGCAGATT | GGACAAAGAA | TTGTGTGTTT |
| | | | | | |
| >1737775IH | AGTCCTTGAC | AAATCTGGAA | GCATGGCGAC | TGGTAACCGC | CTCAATCGAC |
| >1427224 | AGTCCTTGAC | AAATCTGGAA | GCATGGC | | |
| >3235571 | AGTCCTTGAC | AAATCTGGAA | GCATGGCGAC | TGGTAACCGC | CTCAATCGAC |
| Consensus | AGTCCTTGAC | AAATCTGGAA | GCATGGCGAC | TGGTAACCGC | CTCAATCGAC |
| | | | | | |
| >1737775IH | TGAATCAAGC | AGGCCAGCTT | TTCCTGCTGC | AGACAGTTGA | GCTGGGGTCC |
| >3235571 | TGAATCAAGC | AGGCCAGCTT | TTCCTGCTGC | AGACAGTTGA | GCTGGGGTCC |
| Consensus | TGAATCAAGC | AGGCCAGCTT | TTCCTGCTGC | AGACAGTTGA | GCTGGGGTCC |
| | | | | | |
| >1737775IH | TGGGTTGGGA | TGGTGACATT | TGACAGTGCT | GCCCATGTAC | AAAGTGAACT |
| >3235571 | TGGGTTGGGA | TGGTGACATT | TGACAGTGCT | GCCCATGTAC | AAAGTGAACT |
| Consensus | TGGGTTGGGA | TGGTGACATT | TGACAGTGCT | GCCCATGTAC | AAAGTGAACT |

FIG. 1B



| | | | | | |
|------------|------------|-------------|------------|------------|------------|
| >1737775IH | CATACAGATA | AACAGTGGCA | GTGACAGGGA | CACACTCGCC | AAAAGATTAC |
| >3235571 | CATACAGATA | AACAGTGGCA | GTGACAGGGA | CACACTCGCC | AAAAGATTAC |
| Consensus | CATACAGATA | AACAGTGGCA | GTGACAGGGA | CACACTCGCC | AAAAGATTAC |
| >1737775IH | CTGCAGCAGC | TTCAGGAGGG | ACGTCCATCT | GCAGCGGGCT | TCGATCGGCA |
| >3235571 | CTGCAGCAGC | TTCAGGAGGG | ACGTCCATCT | GCAGC | |
| Consensus | CTGCAGCAGC | TTCAGGAGGG | ACGTCCATCT | GCAGCGGGCT | TCGATCGGCA |
| >1737775IH | TTTACTGTGA | TTAGGAAGAA | ATATCCAAC | GATGGATCTG | AAATTGTGCT |
| >2680592 | | GAA | ATATCCAAC | GATGGATCTG | AAATTGTGCT |
| Consensus | TTTACTGTGA | TTAGGAAGAA | ATATCCAAC | GATGGATCTG | AAATTGTGCT |
| >1737775IH | GCTGACGGAT | GGGGAAGACA | ACACTATAAG | TGGGTGCTTT | AACGAGGTCA |
| >2680592 | GCTGACGGAT | GGGGAAGACA | ACACTATAAG | TGGGTGCTTT | AACGAGGTCA |
| Consensus | GCTGACGGAT | GGGGAAGACA | ACACTATAAG | TGGGTGCTTT | AACGAGGTCA |
| >1737775IH | AACAAAGTGG | TGCCATCATC | CACACAGTCG | CTTTGGGGCC | CTCTGCAGCT |
| >2680592 | AACAAAGTNG | TGCCATCATC | CACACAGTCG | CTTTGGGGCC | CTCTGCAGCT |
| >608819 | AACAAAGTGG | TGCCATCATC | CACACAGTCG | CTTTGGGGCC | CTCTGCAGCT |
| >608819IH | AACAAAGTGG | TGCCATCATC | CACACAGTCG | CTTTGGGGCC | CTCTGCAGCT |
| Consensus | AACAAAGTGG | TGCCATCATC | CACACAGTCG | CTTTGGGGCC | CTCTGCAGCT |
| >1737775IH | CAAGAACTAG | AGGAGCTGTC | CAAAATGACA | GGAGGTTTAC | AGACATATGC |
| >2680592 | CAAGAACTAG | AGGAGCTGTC | CAAAATGACA | GGAGGTTTAC | AGACATATGC |
| >608819 | CAAGAACTAG | AGGAGCTGTC | CAAAATGACA | GGAGGTTTAC | AGACATATGC |
| >608819IH | CAAGAACTAG | AGGAGCTGTC | CAAAATGACA | GGAGGTTTAC | AGACATATGC |
| Consensus | CAAGAACTAG | AGGAGCTGTC | CAAAATGACA | GGAGGTTTAC | AGACATATGC |
| >1737775IH | TTCAGATCAA | GTTTCAAGACA | ATGGCCTCAT | TGATGCTTTT | GGGGCCCTTT |
| >2680592 | TTCAGATCAA | GTTTCAAGACA | ATGGCCTCAT | TGATGCTTTT | GGGGCCCTTT |
| >608819 | TTCAGATCAA | GTTTCAAGACA | ATGGCCTCAT | TGATGCTTTT | GGGGCCCTTT |
| >608819IH | TTCAGATCAA | GTTTCAAGACA | ATGGCCTCAT | TGATGCTTTT | GGGGCCCTTT |
| >1629002 | | GAACA | ATGGCCTCAT | TGATGCTTTT | GGGGCCCTTT |
| Consensus | TTCAGATCAA | GTTTCAAGACA | ATGGCCTCAT | TGATGCTTTT | GGGGCCCTTT |
| >1737775IH | CATCAGGAAA | TGGAGCTGTC | TCTCAGCGCT | CCATCCAGCT | TGAGAGTAAG |
| >2680592 | CATCAGGAAA | TGGAGCTGTC | TCTCAGCGCT | CCATCCAGCT | TGAGAGTAAG |
| >608819 | CATCAGGAAA | TGGAGCTGTC | TCTCAGCGCT | CCATCCAGCT | TGAGAGTAAG |
| >608819IH | CATCAGGAAA | TGGAGCTGTC | TCTCAGCGCT | CCATCCAGCT | TGAGAGTAAG |
| >1629002 | CATCAGGAAA | TGGAGCTGTC | TCTCAGCGCT | CCATCCAGCT | TGAGAGTAAG |
| Consensus | CATCAGGAAA | TGGAGCTGTC | TCTCAGCGCT | CCATCCAGCT | TGAGAGTAAG |

FIG. 1C



| | | | | | |
|------------|------------|------------|------------|------------|------------|
| >1737775IH | GGATTAACCC | TCCAGAACAG | CCAGTGGATG | AATGGCACAG | TGATCGTGGA |
| >2680592 | GGATTA | | | | |
| >608819 | GGATTAACCC | TCCAGAACAG | CCAGTGGATG | AATGGCACAG | TGATCGTGGA |
| >608819IH | GGATTAACCC | TCCAGAACAG | CCAGTGGATG | AATGGCACAG | TGATCGTGGA |
| >1629002 | GGATTAACCC | TCCAGAACAG | CCAGTGGATG | AATGGCACAG | TGATCGTGGA |
| >1626435 | | | | GGCACAG | TGATCGTGGA |
| Consensus | GGATTAACCC | TCCAGAACAG | CCAGTGGATG | AATGGCACAG | TGATCGTGGA |
| >1737775IH | CAGCACCGTG | GGAAAGGACA | CTTTGTTTCT | TATCACCTGG | ACAACGCAGC |
| >608819 | CAG | | | | |
| >608819IH | CAGCACCGTG | GGAAAGGACA | CTTTGTTTCT | TATCACCTGG | ACAACGCAGC |
| >1629002 | CAGCACCGTG | GGAAAGGACA | CTTTGTTTCT | TATCACCTGG | ACAACGCAGC |
| >1626435 | CAGCACCGTG | GGAAAGGACA | CTTTGTTTCT | TATCACCTGG | ACAACGCAGC |
| Consensus | CAGCACCGTG | GGAAAGGACA | CTTTGTTTCT | TATCACCTGG | ACAACGCAGC |
| >1737775IH | CTCCCCAAAT | CCTTCTCTGG | GATCCCAGTG | GACAGAAGCA | AGGTGGCTTT |
| >608819IH | CTCCCCAAAT | CCTTCTCTGG | GATCCCAGTG | GACAGAAGCA | AGGTGGCTTT |
| >1629002 | CTCCCCAAAT | CCTTCTCTGG | GATCCCAGTG | GAC | |
| >1626435 | CTCCCCAAAT | CCTTCTCTGG | GATCCCAGTG | GACAGAAGCA | AGGTGGCTTT |
| >1582693 | | | | | GGCTTT |
| Consensus | CTCCCCAAAT | CCTTCTCTGG | GATCCCAGTG | GACAGAAGCA | AGGTGGCTTT |
| >1737775IH | GTAGTGGACA | AAAACACCAA | AATGGCCTAC | CTCCAAATCC | CAGGCATTGC |
| >608819IH | GTAGTGGACA | AAAACACCAA | AATGGCCTAC | CTCCAAATCC | CAGGCATTGC |
| >1626435 | GTAGTGGACA | AAAACACCAA | AATGGCCTAC | CTCCAAATCC | CAGGCATTGC |
| >1582693 | GTAGTGGACA | AAAACACCAA | AATGGCCTAC | CTCCAAATCC | CAGGCATTGC |
| Consensus | GTAGTGGACA | AAAACACCAA | AATGGCCTAC | CTCCAAATCC | CAGGCATTGC |
| >1737775IH | TAAGGTTGGC | ACTTGGAAT | ACAGTCTGCA | AGCAAGCTCA | CAAACCTTGA |
| >608819IH | TAAGGTTGGC | ACTTGGAAT | ACAGTCTGCA | AGCAAGCTCA | CAAACCTTGA |
| >1626435 | TAAGGTTGGC | ACTTGGAAT | ACAGTCTGCA | AGCAAGCTCA | CAAACCTTGA |
| >1582693 | TAAGGTTGGC | ACTTGGAAT | ACAGTCTGCA | AGCAAGCTCA | CAAACCTTGA |
| Consensus | TAAGGTTGGC | ACTTGGAAT | ACAGTCTGCA | AGCAAGCTCA | CAAACCTTGA |
| >1737775IH | CCCTGACTGT | CACGTCCCGT | GCGTCCAATG | CTACCCTGCC | TCCAATTACA |
| >608819IH | CCCTGACTGT | CACGTCCCGT | GCGTCCAATG | CTACCCTGCC | TCCAATTACA |
| >1626435 | CCCTGACTGT | CA | | | |
| >1582693 | CCCTGACTGT | CACGTCCCGT | GCGTCCAATG | CTACCCTGCC | TCCAATTACA |
| Consensus | CCCTGACTGT | CACGTCCCGT | GCGTCCAATG | CTACCCTGCC | TCCAATTACA |
| >1737775IH | GTGACTTCCA | AAACGAACAA | GGACACCAGC | AAATTCCCCA | GCCCTCTGGT |
| >608819IH | GTGACTTCCA | AAACGAACAA | GGACACCAGC | AAATTCCCCA | GCCCTCTGGT |
| >1582693 | GTGACTTCCA | AAACGAACAA | GGACACCAGC | AAATT | |
| >1281379 | | | GACACCAGC | AAATTCCCCA | GCCCTCTGGT |
| Consensus | GTGACTTCCA | AAACGAACAA | GGACACCAGC | AAATTCCCCA | GCCCTCTGGT |

FIG. 1D



| | | | | | |
|------------|------------|-------------|------------|------------|-------------|
| >1737775IH | AGTTTATGCA | AATATTCGCC | AAGGAGCCTC | CCCAATTCTC | AGGGCCAGTG |
| >608819IH | AGTTTATGCA | AATATTCGCC | AAGGAGCCTC | CCCAATTCTC | AGGGCCAGTG |
| >1281379 | AGTTTATGCA | AATATTCGCC | AAGGAGCCTC | CCCAATTCTC | AGGGCCAGTG |
| Consensus | AGTTTATGCA | AATATTCGCC | AAGGAGCCTC | CCCAATTCTC | AGGGCCAGTG |
| | | | | | |
| >1737775IH | TCACAGCCCT | GATTGAATCA | GTGAATGGAA | AAACAGTTAC | CTTGGAACCTA |
| >608819IH | TCACAGCCCT | GATTGAATCA | GTGAATGGAA | AAACAGTTAC | CTTGGAACCTA |
| >1281379 | TCACAGCCCT | GATTGAATCA | GTGAATGGAA | AAACAGTTAC | CTTGGAACCTA |
| Consensus | TCACAGCCCT | GATTGAATCA | GTGAATGGAA | AAACAGTTAC | CTTGGAACCTA |
| | | | | | |
| >1737775IH | CTGGATAATG | GAGCAGGTGC | TGATGCTACT | AAGGATGACG | GTGTCTACTC |
| >608819IH | CTGGATAATG | GAGCAGGTGC | TGATGCTACT | AAGGATGACG | GTGTCTACTC |
| >1281379 | CTGGATAATG | GAGCAGGTGC | TGATGCTACT | AAGGATGACG | GTGTCTACTC |
| Consensus | CTGGATAATG | GAGCAGGTGC | TGATGCTACT | AAGGATGACG | GTGTCTACTC |
| | | | | | |
| >1737775IH | AAGGTATTTT | ACAACCTTATG | ACACGAATGG | TAGATACAGT | GTAAAAGTGC |
| >608819IH | AAGGTATTTT | ACAACCTTATG | ACACGAATGG | TAGATACAGT | GTAAAAGTGC |
| >1281379 | AAGGTATTTT | ACAACCTTATG | ACACGAATGG | TAGATACAGT | GTAAAAGTGC |
| >1628509 | | | | | GTGC |
| Consensus | AAGGTATTTT | ACAACCTTATG | ACACGAATGG | TAGATACAGT | GTAAAAGTGC |
| | | | | | |
| >1737775IH | GGGCTCTGGG | AGGAGTTAAC | GCAGCCAGAC | GGAGAGTGAT | ACCCCAGCAG |
| >608819IH | GGGCTCTGGG | AGGAGTTAAC | GCAGCCAGAC | GGAGAGTGAT | ACCCCAGCAG |
| >1281379 | GGGCTC | | | | |
| >1628509 | GGGCTCTGGG | AGGAGTTAAC | GCAGCCAGAC | GGAGAGTGAT | ACCCCAGCAG |
| Consensus | GGGCTCTGGG | AGGAGTTAAC | GCAGCCAGAC | GGAGAGTGAT | ACCCCAGCAG |
| | | | | | |
| >1737775IH | AGTGGAGCAC | TGTACATACC | TGGCTGGATT | GAGAATGATG | AAATACAATG |
| >608819IH | AGTGGAGCAC | TGTACATACC | TGGCTGGATT | GAGAATGATG | AAATACAATG |
| >1628509 | AGTGGAGCAC | TGTACATACC | TGGCTGGATT | GAGAATGATG | AAATACAATG |
| Consensus | AGTGGAGCAC | TGTACATACC | TGGCTGGATT | GAGAATGATG | AAATACAATG |
| | | | | | |
| >1737775IH | GAATCCACCA | AGACCTGAAA | TTAATAAGGA | TGATGTTCAA | CACAAGCAAG |
| >608819IH | GAATCCACCA | AGACCTGAAA | TTAATAAGGA | TGATGTTCAA | CACAAGCAAG |
| >1628509 | GAATCCACCA | AGACCTGAAA | TTAATAAGGA | TGATGTTCAA | CACAAGCAAG |
| Consensus | GAATCCACCA | AGACCTGAAA | TTAATAAGGA | TGATGTTCAA | CACAAGCAAG |
| | | | | | |
| >1737775IH | TGTGTTTCAG | CAGAACATCC | TCGGGAGGCT | CATTTGTGGC | TTCTGATGTC |
| >608819IH | TGTGTTTCAG | CAGAACATCC | TCGGGAGGCT | CATTTGTGGC | TTCTGATGTC |
| >1628509 | TGTGTTTCAG | CAGAACATCC | TCGGGAGGCT | CATTTGTGGC | TTCTGATGTC |
| Consensus | TGTGTTTCAG | CAGAACATCC | TCGGGAGGCT | CATTTGTGGC | TTCTGATGTC |
| | | | | | |
| >1737775IH | CCAAATGCTC | CCATACCTGA | TCTCTTCCCA | CCTGGCCAAA | TCACCGACCT |
| >608819IH | CCAAATGCTC | CCATACCTGA | TCTCTTCCCA | CCTGGCCAAA | TCACCGACCT |
| >1628509 | CCAAATGCTC | CCATACCTGA | TCT | | |
| >2060739 | | | | | ACCT |
| Consensus | CCAAATGCTC | CCATACCTGA | TCTCTTCCCA | CCTGGCCAAA | TCACCGACCT |

FIG. 1E



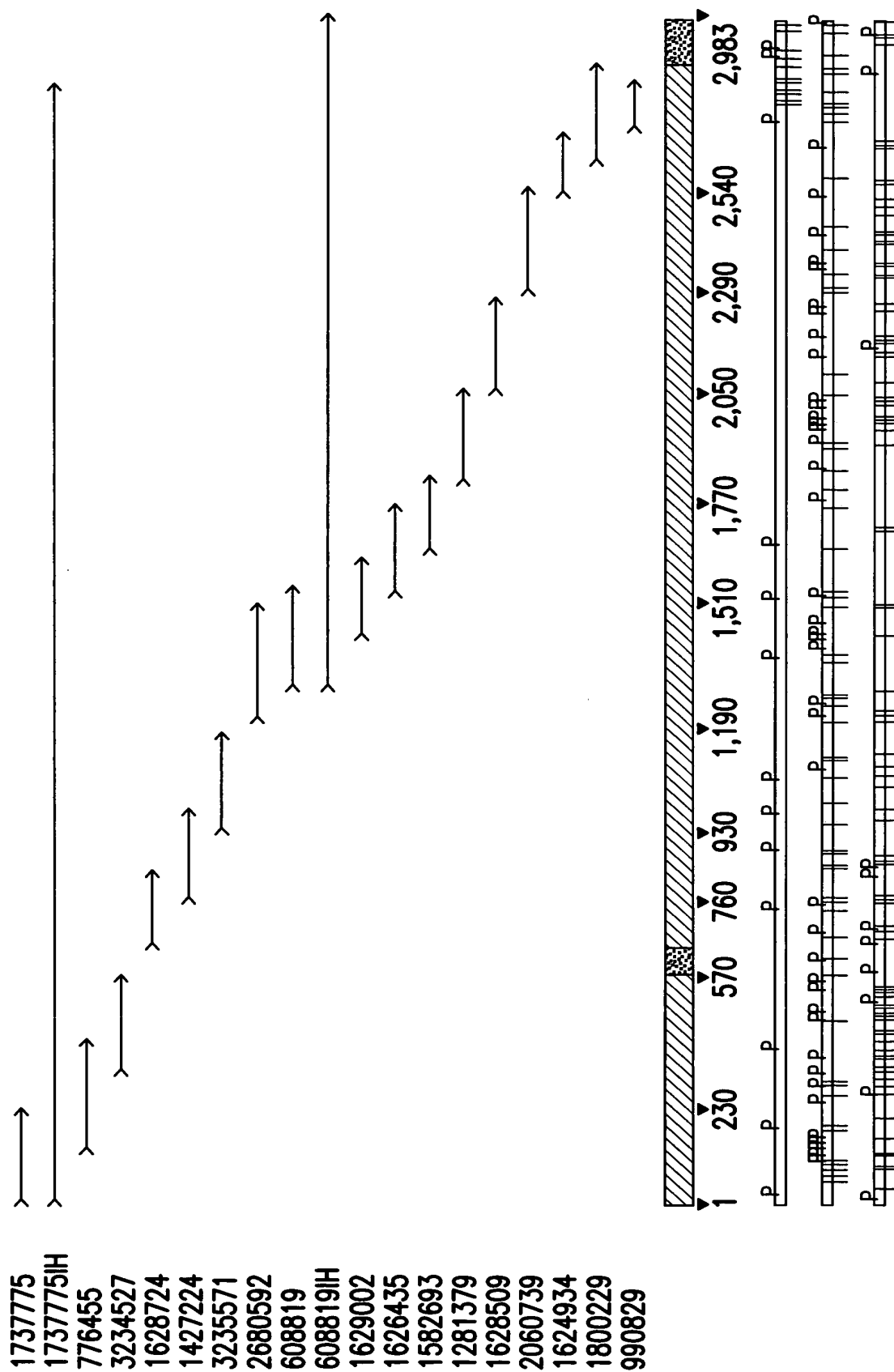
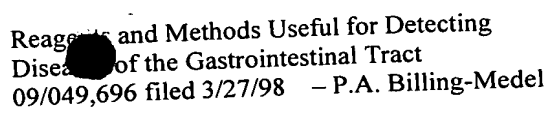
| | | | | | |
|------------|------------|-------------|------------|------------|------------|
| >1737775IH | GAAGGCGGAA | ATTCACGGGG | GCAGTCTCAT | TAATCTGACT | TGGACAGCTC |
| >608819IH | GAAGGCGGAA | ATTCACGGGG | GCAGTCTCAT | TAATCTGACT | TGGACAGCTC |
| >2060739 | GAAGGCGGAA | ATTCACGGGG | GCAGTCTCAT | TAATCTGACT | TGGACAGCTC |
| Consensus | GAAGGCGGAA | ATTCACGGGG | GCAGTCTCAT | TAATCTGACT | TGGACAGCTC |
| >1737775IH | CTGGGGATGA | TTATGACCAT | GGAACAGCTC | ACAAGTATAT | CATTCGAATA |
| >608819IH | CTGGGGATGA | TTATGACCAT | GGAACAGCTC | ACAAGTATAT | CATTCGAATA |
| >2060739 | CTGGGGATGA | TTATGACCAT | GGAACAGCTC | ACAAGTATAT | CATTCGAATA |
| Consensus | CTGGGGATGA | TTATGACCAT | GGAACAGCTC | ACAAGTATAT | CATTCGAATA |
| >1737775IH | AGTACAAGTA | TTCTTGATCT | CAGAGACAAG | TTCAATGAAT | CTCTTCAAGT |
| >608819IH | AGTACAAGTA | TTCTTGATCT | CAGAGACAAG | TTCAATGAAT | CTCTTCAAGT |
| >2060739 | AGTACAAGTA | TTCTTGATCT | CAGAGACAAG | TTCAATGAAT | CTCTTCAAGT |
| Consensus | AGTACAAGTA | TTCTTGATCT | CAGAGACAAG | TTCAATGAAT | CTCTTCAAGT |
| >1737775IH | GAATACTACT | GCTCTCATCC | CAAAGGAAGC | CAACTCTGAG | GAAGTCTTTT |
| >608819IH | GAATACTACT | GCTCTCATCC | CAAAGGAAGC | CAACTCTGAG | GAAGTCTTTT |
| >2060739 | GAATACTACT | GCTCTCATCC | CAAAGGAAGC | CAACTCTGAG | GAAGTCTTTT |
| Consensus | GAATACTACT | GCTCTCATCC | CAAAGGAAGC | CAACTCTGAG | GAAGTCTTTT |
| >1737775IH | TGTTTAAACC | AGAAAAACATT | ACTTTTGAAA | ATGGCACAGA | TCTTTTCATT |
| >608819IH | TGTTTAAACC | AGAAAAACATT | ACTTTTGAAA | ATGGCACAGA | TCTTTTCATT |
| >2060739 | TGTTTAAACC | AGAAAAACATT | ACTTTTGAAA | ATGGCACAGA | TCTT |
| >1624934 | | | | ACAGA | TCTTTTCATT |
| Consensus | TGTTTAAACC | AGAAAAACATT | ACTTTTGAAA | ATGGCACAGA | TCTTTTCATT |
| >1737775IH | GCTATTCAGG | CTGTTGATAA | GGTCGATCTG | AAATCAGAAA | TATCCAACAT |
| >608819IH | GCTATTCAGG | CTGTTGATAA | GGTCGATCTG | AAATCAGAAA | TATCCAACAT |
| >1624934 | GCTATTCAGG | CTGTTGATAA | GGTCGATCTG | AAATCAGAAA | TATCCAACAT |
| Consensus | GCTATTCAGG | CTGTTGATAA | GGTCGATCTG | AAATCAGAAA | TATCCAACAT |
| >1737775IH | TGCACGAGTA | TCTTTGTTTA | TTCCTCCACA | GACTCCGCCA | GAGACACCTA |
| >608819IH | TGCACGAGTA | TCTTTGTTTA | TTCCTCCACA | GACTCCGCCA | GAGACACCTA |
| >1624934 | TGCACGAGTA | TCTTTGTTTA | TTCCTCCACA | GACTCCGCCA | GAGACACCTA |
| >1800229 | | GTTTA | TTCCTCCACA | GACTCCGCCA | GAGACACCTA |
| Consensus | TGCACGAGTA | TCTTTGTTTA | TTCCTCCACA | GACTCCGCCA | GAGACACCTA |
| >1737775IH | GTCCTGATGA | AACGTCTGCT | CCTTGTCCTA | ATATTCATAT | CAACAGCACC |
| >608819IH | GTCCTGATGA | AACGTCTGCT | CCTTGTCCTA | ATATTCATAT | CAACAGCACC |
| >1624934 | GTCCTGATGA | AACGTCTGCT | CCTTGTCCTA | ATATTCATA | |
| >1800229 | GTCCTGATGA | AACGTCTGCT | CCTTGTCCTA | ATATTCATAT | CAACAGCACC |
| Consensus | GTCCTGATGA | AACGTCTGCT | CCTTGTCCTA | ATATTCATAT | CAACAGCACC |
| >1737775IH | ATTCCTGGCA | TTCACATTTT | AAAAATTATG | TGGAAGTGGA | TAGGAGAACT |
| >608819IH | ATTCCTGGCA | TTCACATTTT | AAAAATTATG | TGGAAGTGGA | TAGGAGAACT |
| >1800229 | ATTCCTGGCA | TTCACATTTT | AAAAATTATG | TGGAAGTGGA | TAGGAGAACT |
| >990829 | GGCA | TTCACATTTT | AAAAATTATG | TGGAAGTGGA | TAGGAGAACT |
| Consensus | ATTCCTGGCA | TTCACATTTT | AAAAATTATG | TGGAAGTGGA | TAGGAGAACT |

FIG. 1F

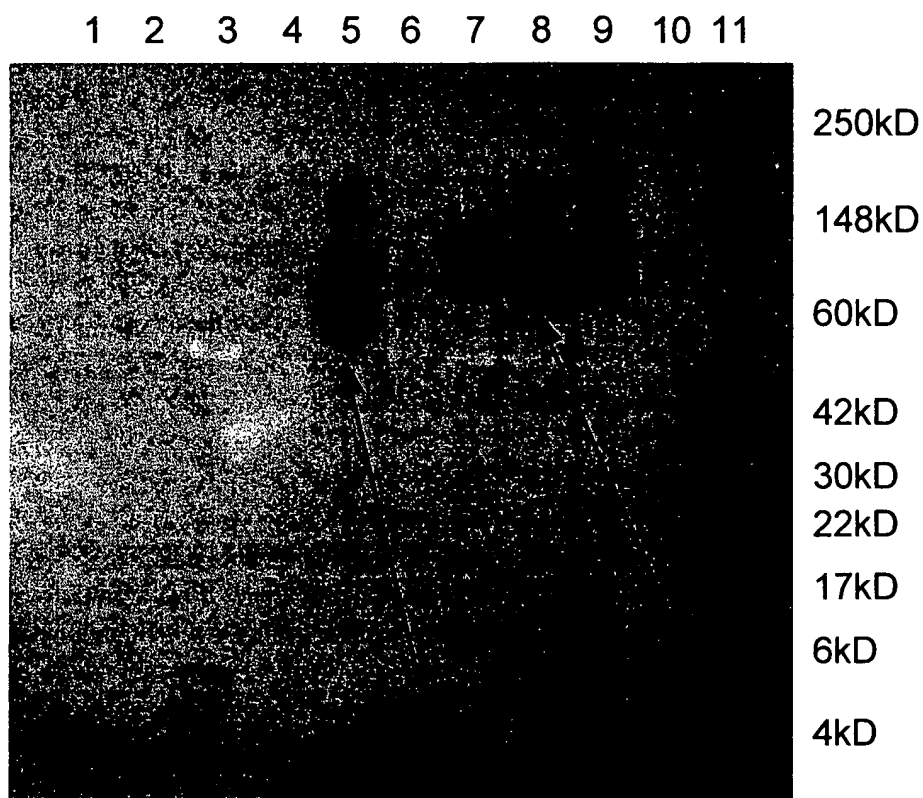


| | |
|------------|--|
| >1737775IH | GCAGCTGTCA ATAGCCTAGG GCTGAATTTT TGTCAGATAA ATAAAATAAA |
| >608819IH | GCAGCTGTCA ATAGCCTAGG GCTGAATTTT TGTCAGATAA ATAAAATAAA |
| >1800229 | GCAGCTGTCA ATAGCCTAGG GCTGAATTTT TGTCAGATAA ATAAAATAAA |
| >990829 | GCAGCTGTCA ATAGCCTAGG GCTGAATTTT TGTCAGATAA ATAAAATAAA |
| Consensus | GCAGCTGTCA ATAGCCTAGG GCTGAATTTT TGTCAGATAA ATAAAATAAA |
| >1737775IH | TCATTCATCC TTA |
| >608819IH | TCATTCATCC TTTTTTTTGA TTATAAAATT TTCTAAAATG TATTTTAGAC |
| >1800229 | TCATTCATCC TTTTTTTTGA TTATAAAATT TTCTAAAATG TATTTTAGAC |
| >990829 | TCATTCATCC TT |
| Consensus | TCATTCATCC TTTTTTTTGA TTATAAAATT TTCTAAAATG TATTTTAGAC |
| >608819IH | TTCCTGTAGG GGGCGATATA CTAAATGTAT ATAGTACATT TATACTAAAT |
| >1800229 | TTCCTGT |
| Consensus | TTCCTGTAGG GGGCGATATA CTAAATGTAT ATAGTACATT TATACTAAAT |
| >608819IH | GTATTCCTGT AGGGGGCGAT AACTAAATG TATTTTAGAC TTCCTGTAGG |
| Consensus | GTATTCCTGT AGGGGGCGAT AACTAAATG TATTTTAGAC TTCCTGTAGG |
| >608819IH | GGGCGATAAA ATAAAATGCT AAACAACTGG GTA |
| Consensus | GGGCGATAAA ATAAAATGCT AAACAACTGG GTA |

FIG. 1 G



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10914 U.S. PTO



| Lane | Tissue | Lane | Tissue |
|------|--------------|------|---------|
| 1 | Prostate | 7 | Colon |
| 2 | Breast | 8 | Colon |
| 3 | Bladder | 9 | Colon |
| 4 | Lung | 10 | Blank |
| 5 | Colon cancer | 11 | Markers |
| 6 | Colon cancer | | |

FIG.3

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